



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

July 13, 2012

Via E-mail

Mr. Alan J. Dean
Executive Vice President, Chief Financial Officer and Treasurer
CBOE Holdings, Inc.
400 South LaSalle Street
Chicago, IL 60605

**Re: CBOE Holdings, Inc.
Form 10-K for the fiscal year ended December 31, 2011
Filed February 28, 2012
File No. 001-34774**

Dear Mr. Dean:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Year Ended December 31, 2011

As one of the largest options exchanges in the world and the largest options exchange in the U.S., we may be at a greater risk for a cyber attack and other cyber security risks, page 24

1. With a view to disclosure, please provide us a brief description of the costs incurred in connection with the remediation of the February 2012 service attack, any other consequences to your business operations from this attack including any related litigation, the extent of any insurance coverage, and the extent to which you expect to increase costs incurred on cyber security in future periods.

14. Commitments and Contingencies, page 71

2. For all of the loss contingencies discussed in this note, we have the following comments:
- a. ASC 450 requires a company to disclose the amount or range of reasonably possible loss, as that term is defined. It does not appear that you have provided any quantitative information. Please disclose this information in your next Form 10-Q and provide us with your proposed disclosure.

If you conclude that you cannot estimate a range of reasonably possible losses on any of the matters, please disclose this fact in your next Form 10-Q in accordance with ASC 450. In addition, for those matters for which you cannot estimate a range, please supplementally provide the following:

- An explanation of the procedures you undertake on a quarterly basis to attempt to develop a range of reasonably possible loss for disclosure.
 - The name of any case in which the plaintiff has requested in public filings a quantified amount of relief and the amount of such relief. For each of these filings, please explain why a range of reasonably possible loss cannot be determined.
- b. Your statement that the “resolution” of a matter is not material is unclear. For example, it is unclear whether this phrase suggests that the accrued amount is immaterial, the range of reasonably possible loss in excess of the amount accrued is immaterial, or something else. Please clarify this phrase in your next Form 10-Q and provide us with your proposed disclosure.

Signatures, page 82

3. In future Exchange Act periodic reports, please revise the signature page to include signatures for your principal executive officer, your principal financial officer, and your controller or principal accounting officer.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and

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- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Eric McPhee at (202) 551-3693 or me at (202) 551-3486 if you have questions regarding comments on the financial statements and related matters. Please contact Angela McHale at (202) 551-3402 or Mike McTiernan at (202) 551-3852 with any other questions.

Sincerely,

/s/ Daniel L. Gordon

Daniel L. Gordon
Branch Chief